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SEARETE LLC CLARENCE T. TEGREENE 1756 - 114TH AVE., S.E. SUITE 110 BELLEVUE, WA 98004			EXAMINER SAVLA, ARPAN P	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/734,659	HILLIS ET AL.	
	Examiner	Art Unit	
	Arpan P. Savla	2185	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/8/07, 4/9/07, 4/23/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This Office action is in response to Applicant's communication filed April 9, 2007 in response to the Office action dated November 3, 2006. Claim 16 has been amended. Claims 1-32 are pending in this application.

ACKNOWLEDGMENT OF REFERENCES CITED BY APPLICANT

Information Disclosure Statement

1. As required by MPEP § 609(c), Applicant's submission of the Information Disclosure Statements dated January 8, 2007, April 9, 2007, and April 23, 2007 are acknowledged by Examiner and some of the cited references have been considered in the examination of the claims now pending. As required by MPEP § 609 c(2), a copy of the PTOL-1449 initialed and dated by Examiner is attached to the instant office action.
2. References AA-AE on the Information Disclosure Statement dated April 9, 2007 were not considered because these references were originally cited by the Examiner on the PTO-892 (Notice of References Cited) sheet which was part of the Office Action dated November 23, 2006.

OBJECTIONS

Specification

3. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the

patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

The abstract of the disclosure is objected to because it is not descriptive. The abstract provided in this application should at least provide the technical disclosure of the improvement and also concise details of the organization and/or operation of the system. Correction is required. See MPEP § 608.01(b).

4. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

5. The disclosure is objected to because the instant application was not filed as a continuation-in-part of co-pending application 10/734,650 and therefore the instant application should not be referred to as a continuation-in-part in the specification, contrary to the Applicant's amendments.

Appropriate correction is required.

REJECTIONS NOT BASED ON PRIOR ART

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. **Claims 1-32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.** The claims fail to produce a tangible result. To be tangible the claimed invention must produce a practical application or real world result. Independent claims 1 and 17 merely recite a determination step and a definition step. The determination and definition steps are never applied in a meaningful way to produce a practical application or real world result (i.e. the determination and definition steps do not result in a physical transformation). Thus, claims 1-32 are directed to non-statutory subject matter.

REJECTIONS BASED ON PRIOR ART

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. **Claims 1-3, 5-7, 10-13, 17-19, 21-23, and 26-29** are rejected under U.S.C. 102(b) as being anticipated by Yao et al. (U.S. Patent 5,938,734).

10. **As per claim 1**, Yao discloses a method comprising:

determining an organization of at least one content of at least one spatial data storage system (col. 6, lines 59-64; Fig. 4, element S18); *It should be noted that the "disk device" is analogous to the "spatial data storage system."*

and defining a schedule of content transmission in response to the organization of the at least one content of the at least one spatial data storage system, the schedule identifying the content by one or more times (col. 7, lines 21-60; Fig. 5, elements S21-S25). *It should be noted that "carries out the scheduling" is analogous to "defining a schedule."*

11. **As per claim 2**, Yao discloses said determining an organization of at least one content of at least one spatial data storage system further comprises:

determining one or more storage locations of at least one spatial address device associated with a video recording (col. 1, lines 13-19; col. 6, lines 59-64; Fig. 4, element S18). *See the citation note for the first limitation in claim 1 above.*

12. **As per claim 3**, Yao discloses said determining an organization of at least one content of at least one spatial data storage system further comprises:

determining one or more storage locations of at least one spatial address device associated with at least one audio recording (col. 1, lines 13-19; col. 6, lines 59-64; Fig. 4, element S18). *See the citation note for the first limitation in claim 1 above.*

13. **As per claim 5**, Yao discloses said determining an organization of at least one content of at least one spatial data storage system further comprises:

determining one or more storage locations of at least one spatial address device associated with at least a portion of at least one of computer processable and network processable data (col. 1, lines 13-19; col. 6, lines 59-64; Fig. 4, element S18). *It should be noted that video and audio streams are all both computer processable data as well as network processable data. Also, see the citation note for the first limitation in claim 1 above.*

14. **As per claim 6**, Yao discloses said determining an organization of at least one content of at least one spatial data storage system further comprises:

determining an organization of at least one content of at least one file address storage system (col. 1, lines 13-19; col. 6, lines 59-64; Fig. 4, element S18).

15. **As per claim 7**, Yao discloses said determining an organization of at least one content of at least one spatial data storage system further comprises:

determining an organization of at least one content of at least one disk address storage system (col. 1, lines 13-19; col. 6, lines 59-64; Fig. 4, element S18).

16. **As per claim 10**, Yao discloses said determining an organization of at least one content of at least one spatial data storage system further comprises:

determining an organization of at least one content of at least one object address storage system (col. 1, lines 13-19; col. 6, lines 59-64; Fig. 4, element S18).

17. **As per claim 11**, Yao discloses said defining a schedule of content transmission in response to the organization of the at least one content of the at least one spatial

data storage system, the schedule identifying the content by one or more times further comprises:

defining the schedule in response to an order in which the at least one content is spatially resident upon one or more spatial address devices (col. 7, lines 21-60; Fig. 5, elements S21-S25). *It should be that the "real time stream data" located on the disk device is analogous to "at least one content spatially resident upon one or more spatial address devices."*

18. **As per claim 12**, Yao discloses said defining the schedule in response to an order in which the at least one content is spatially resident upon one or more spatial address devices further comprises:

determining a first time interval during which a first segment of a first content will be read from a first spatial address device (col. 9, lines 33-43 and 58-64; Fig. 7); *It should be noted that "S0" is analogous to the "first segment of a first content" and "disk-0" is analogous to the "first spatial address device."*

determining a second time interval during which a first segment of a second content will be read from a second spatial address device (col. 9, lines 33-43 and 58-64; Fig. 7); *It should be noted that "S1" is analogous to the "first segment of a second content" and "disk-4" is analogous to the "second spatial address device."*

and defining the schedule in response to the first time interval and the second time interval (col. 9, lines 44-52).

19. **As per claim 13**, Yao discloses said defining the schedule in response to an order in which the at least one content is spatially resident upon one or more spatial address devices further comprises:

determining a first time interval during which a first segment of a first content will be read from a first spatial address device (col. 9, lines 33-43; Fig. 6); *It should be noted that "S0" is analogous to the "first segment of a first content" and "disk-0" is analogous to the "first spatial address device."*

determining a second time interval during which a second segment of the first content will be read from a second spatial address device (col. 9, lines 33-43; Fig. 6); *It should be noted that "S1" is analogous to the "second segment of a first content" and "disk-1" is analogous to the "second spatial address device."*

and defining the schedule in response to the first time interval and the second time interval (col. 9, lines 44-52).

20. **As per claim 17**, Yao discloses a system comprising:

means for determining an organization of at least one content of at least one spatial data storage system (col. 6, lines 59-64; Fig. 4, element S18); *See the citation note for the similar limitation in claim 1 above.*

and means for defining a schedule of content transmission in response to the organization of the at least one content of the at least one spatial data storage system, the schedule identifying the content by one or more times (col. 7, lines 21-60; Fig. 5, elements S21-S25). *See the citation note for the similar limitation in claim 1 above.*

21. **As per claim 18**, Yao discloses said means for determining an organization of at least one content of at least one spatial data storage system further comprises:

means for determining one or more storage locations of at least one spatial address device associated with a video recording (col. 1, lines 13-19; col. 6, lines 59-64; Fig. 4, element S18). *See the citation note for the first limitation in claim 1 above.*

22. **As per claim 19**, Yao discloses said means for determining an organization of at least one content of at least one spatial data storage system further comprises:

means for determining one or more storage locations of at least one spatial address device associated with at least one audio recording (col. 1, lines 13-19; col. 6, lines 59-64; Fig. 4, element S18). *See the citation note for the first limitation in claim 1 above.*

23. **As per claim 21**, Yao discloses said means for determining an organization of at least one content of at least one spatial data storage system further comprises:

means for determining one or more storage locations of at least one spatial address device associated with at least a portion of at least one of computer processable and network processable data (col. 1, lines 13-19; col. 6, lines 59-64; Fig. 4, element S18). *See the citation note for claim 5 above.*

24. **As per claim 22**, Yao discloses said means for determining an organization of at least one content of at least one spatial data storage system further comprises:

means for determining an organization of at least one content of at least one file address storage system (col. 1, lines 13-19; col. 6, lines 59-64; Fig. 4, element S18).

25. **As per claim 23**, Yao discloses said means for determining an organization of at least one content of at least one spatial data storage system further comprises:

means for determining an organization of at least one content of at least one disk address storage system (col. 1, lines 13-19; col. 6, lines 59-64; Fig. 4, element S18).

26. **As per claim 26**, Yao discloses said means for determining an organization of at least one content of at least one spatial data storage system further comprises:

means for determining an organization of at least one content of at least one object address storage system (col. 1, lines 13-19; col. 6, lines 59-64; Fig. 4, element S18).

27. **As per claim 27**, Yao discloses said means for defining a schedule of content transmission in response to the organization of the at least one content of the at least one spatial data storage system, the schedule identifying the content by one or more times further comprises:

means for defining the schedule in response to an order in which the at least one content is spatially resident upon one or more spatial address devices (col. 7, lines 21-60; Fig. 5, elements S21-S25). *See the citation note for claim 11 above.*

28. **As per claim 28**, Yao discloses said means for defining the schedule in response to an order in which the at least one content is spatially resident upon one or more spatial address devices further comprises:

means for determining a first time interval during which a first segment of a first content will be read from a first spatial address device (col. 9, lines 33-43 and 58-64; Fig. 7); *See the citation note for the similar limitation in claim 12 above.*

means for determining a second time interval during which a first segment of a second content will be read from a second spatial address device (col. 9, lines 33-43 and 58-64; Fig. 7); *See the citation note for the similar limitation in claim 12 above.*

and means for defining the schedule in response to the first time interval and the second time interval (col. 9, lines 44-52).

29. **As per claim 29**, Yao discloses said means for defining the schedule in response to an order in which the at least one content is spatially resident upon one or more spatial address devices further comprises:

means for determining a first time interval during which a first segment of a first content will be read from a first spatial address device (col. 9, lines 33-43; Fig. 6); *See the citation note for the similar limitation in claim 13 above.*

means for determining a second time interval during which a second segment of the first content will be read from a second spatial address device (col. 9, lines 33-43; Fig. 6); *See the citation note for the similar limitation in claim 13 above.*

and means for defining the schedule in response to the first time interval and the second time interval (col. 9, lines 44-52).

Claim Rejections - 35 USC § 103

30. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

31. Claims 14-16 and 30-32 are rejected under 35 U.S.C. 103(a) as being obvious over Yao in view of Gallagher et al. (U.S. Patent 5,644,789).

32. As per claim 14, Yao discloses all the limitations of claim 14 except said defining a schedule of content transmission in response to the organization of the at least one content of the at least one spatial data storage system, the schedule identifying the content by one or more times further comprises:

selecting a first content from a log of one or more data switch controller content requests.

Gallagher discloses said defining a schedule of content transmission in response to the organization of the at least one content of the at least one spatial data storage system, the schedule identifying the content by one or more times further comprises:

selecting a first content from a log of one or more data switch controller content requests (col. 3, lines 61-63; col. 6, lines 34-44; Fig. 2, element 323; Fig. 5). *It should be noted that the "queue" is analogous to the "log."*

Yao and Gallagher are analogous art because they are from the same field of endeavor, that being multimedia playback systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to implement Gallagher's execution queue within Yao's real time stream server.

The motivation for doing so would have been to provide more efficient utilization of disk storage devices (Gallagher, col. 2, lines 60-61).

Therefore, it would have been obvious to combine Yao and Gallagher for the benefit of obtaining the invention as specified in claim 14.

33. **As per claim 15**, the combination of Yao/Gallagher discloses said selecting a first content from a log of one or more data switch controller content requests further comprises:

generating a prospective request for content from a data switch controller (Gallagher, col. 3, lines 58-63);

and logging the prospectively generated request for content from the data switch controller (Gallagher, col. 4, lines 1-9; Fig. 2, element 323). *It should be noted that "placement in the execution queue" is analogous to "logging."*

34. **As per claim 16**, the combination of Yao/Gallagher discloses said generating a prospective request for content from a data switch controller further comprises:

consulting at least one historical request for content from at least one data switch controller (Gallagher, col. 5, lines 62-64; Fig. 5). *It should be noted that "request 2" is consulted in order to execute "function 2."*

35. **As per claim 30**, Yao discloses all the limitations of claim 30 except said means for defining a schedule of content transmission in response to the organization of the at least one content of the at least one spatial data storage system, the schedule identifying the content by one or more times further comprises:

means for selecting a first content from a log of one or more data switch controller content requests.

Gallagher discloses said means for defining a schedule of content transmission in response to the organization of the at least one content of the at least one spatial data storage system, the schedule identifying the content by one or more times further comprises:

means for selecting a first content from a log of one or more data switch controller content requests (col. 3, lines 61-63; col. 6, lines 34-44; Fig. 2, element 323; Fig. 5). *See the citation note for claim 14 above.*

Yao and Gallagher are analogous art because they are from the same field of endeavor, that being multimedia playback systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to implement Gallagher's execution queue within Yao's real time stream server.

The motivation for doing so would have been to provide more efficient utilization of disk storage devices (Gallagher, col. 2, lines 60-61).

Therefore, it would have been obvious to combine Yao and Gallagher for the benefit of obtaining the invention as specified in claim 30.

36. **As per claim 31**, the combination of Yao/Gallagher discloses said means for selecting a first content from a log of one or more data switch controller content requests further comprises:

means for generating a prospective request for content from a data switch controller (Gallagher, col. 3, lines 58-63);

and means for logging the prospectively generated request for content from the data switch controller (Gallagher, col. 4, lines 1-9; Fig. 2, element 323). *See the citation note for the similar limitation in claim 15 above.*

37. **As per claim 32**, the combination of Yao/Gallagher discloses said means for generating a prospective request for content from a data switch controller further comprises:

means for consulting at least one historical request for content from at least one data switch controller (Gallagher, col. 5, lines 62-64; Fig. 5). *See the citation note for claim 16 above.*

38. **Claims 4, 8-9, 20, and 24-25** are rejected under 35 U.S.C. 103(a) as being obvious over Yao in view of Jaeger (U.S. Patent 6,345,028).

39. **As per claim 4**, Yao discloses all the limitations of claim 4 except said determining an organization of at least one content of at least one spatial data storage system further comprises:

determining one or more storage locations of at least one spatial address device associated with at least one audio-visual recording.

Jaeger discloses said determining an organization of at least one content of at least one spatial data storage system further comprises:

determining one or more storage locations of at least one spatial address device associated with at least one audio-visual recording (col. 6, lines 49-58; col. 8, lines 36-46; Fig. 5). *It should be noted that "audio and video tracks" are analogous to "at least one audio-visual recording."*

Yao and Jaeger are analogous art because they are from the same field of endeavor, that being multimedia playback systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to implement Jaeger's time stamp locations of the composite data frames within Yao's real time stream server.

The motivation for doing so would have been to maximize the number of audio or video tracks that can be played back from a disk drive (Jaeger, col. 1, lines 14-16).

Therefore, it would have been obvious to combine Yao and Jaeger for the benefit of obtaining the invention as specified in claim 4.

40. **As per claim 8**, the combination of Yao/Jaeger discloses said determining an organization of at least one content of at least one spatial data storage system further comprises:

determining an organization of at least one content of at least one tape address storage system (Jaeger, col. 5, lines 12-20; col. 6, lines 49-58).

41. **As per claim 9**, the combination of Yao/Jaeger discloses said determining an organization of at least one content of at least one spatial data storage system further comprises:

determining an organization of at least one content of at least one substantially static memory address storage system (Jaeger, col. 5, lines 12-20; col. 6, lines 49-58).

42. **As per claim 20**, Yao discloses all the limitations of claim 20 except said means for determining an organization of at least one content of at least one spatial data storage system further comprises:

means for determining one or more storage locations of at least one spatial address device associated with at least one audio-visual recording.

Jaeger discloses said means for determining an organization of at least one content of at least one spatial data storage system further comprises:

means for determining one or more storage locations of at least one spatial address device associated with at least one audio-visual recording (col. 6, lines 49-58; col. 8, lines 36-46; Fig. 5). *See the citation note for claim 4 above.*

Yao and Jaeger are analogous art because they are from the same field of endeavor, that being multimedia playback systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to implement Jaeger's time stamp locations of the composite data frames within Yao's real time stream server.

The motivation for doing so would have been to maximize the number of audio or video tracks that can be played back from a disk drive (Jaeger, col. 1, lines 14-16).

Therefore, it would have been obvious to combine Yao and Jaeger for the benefit of obtaining the invention as specified in claim 20.

43. **As per claim 24**, the combination of Yao/Jaeger discloses said means for determining an organization of at least one content of at least one spatial data storage system further comprises:

means for determining an organization of at least one content of at least one tape address storage system (Jaeger, col. 5, lines 12-20; col. 6, lines 49-58).

44. **As per claim 25**, the combination of Yao/Jaeger discloses said means for determining an organization of at least one content of at least one spatial data storage system further comprises:

means for determining an organization of at least one content of at least one substantially static memory address storage system (Jaeger, col. 5, lines 12-20; col. 6, lines 49-58).

Response to Arguments

45. Applicant's arguments filed April 9, 2007 with respect to **claims 1-32** have been fully considered but they are not persuasive.

46. With respect to Applicant's argument in Section III(B)(1)(a) of the communication filed April 9, 2007, the Examiner respectfully disagrees. Yao's scheduling is dependent upon the time-slot interval. It is necessary for each one of the unit streams S0 to Sm-1 to select a time-slot for carrying the disk access, so that it becomes possible to read out the respective top block from the disk device which stores that top block, before the selected transfer start timing, without affecting the continuity of the other already connected unit streams. The ID number of the disk device which stores the top block of each unit stream can be obtained from the directory information obtained at the step S22. Therefore, the disk device ID numbers are used to select a proper time-slot for carrying out the disk access. Thus, the scheduling of transmission of the unit streams is done in response to the values of the disk device ID numbers as detailed above. Accordingly, as simply and broadly claimed, Yao sufficiently discloses defining a

schedule of content transmission in response to the organization of the at least one content of the at least one spatial data storage system.

47. With respect to Applicant's argument in Section III(B)(1)(b) of the communication filed April 9, 2007, the Examiner respectfully disagrees. As detailed directly above in section 46 of the current Office action, Yao's disk device ID numbers are used to select a proper time-slot for carrying out the disk access. Thus, the scheduling of transmission of the unit streams is done in response to the values of the disk device ID numbers. Accordingly, as simply and broadly claimed, Yao sufficiently discloses defining a schedule of content transmission in response to the organization of the at least one content of the at least one spatial data storage system.

48. With respect to Applicant's argument in Section III(B)(3) of the communication filed April 9, 2007, the Examiner respectfully disagrees. As addressed above, independent claim 1 is not patentable, thus, Applicant's argument with respect to dependent claims 2-16 is not persuasive.

49. With respect to Applicant's argument in Section III(B)(3) of the communication filed April 9, 2007, the Examiner respectfully disagrees. The Examiner submits that disk devices can act as object-oriented databases. Thus, Yao's disk device can act as an "object address storage system" as simply and broadly claimed. Accordingly, Yao sufficiently discloses dependent claim 10.

50. With respect to Applicant's argument in Section III(B)(4) of the communication filed April 9, 2007, the Examiner respectfully disagrees. As detailed above, Yao's scheduling is done in such way as to read out the respective top block from the disk

device which stores that top block, before the selected transfer start timing, without affecting the continuity of the other already connected unit streams. Thus, the scheduling of transmission of the unit streams is also done in response to the order of the blocks upon the disk device. Accordingly, Yao sufficiently discloses dependent claim 11.

51. With respect to Applicant's argument in Section III(B)(5) of the communication filed April 9, 2007, the Examiner respectfully disagrees. In Yao, even though the interval lengths may be the same, unit stream S1 is read from disk-4 during an interval separate from the interval during which unit stream S0 is read from disk-0. Accordingly, Yao sufficiently discloses dependent claim 12.

52. With respect to Applicant's argument in Section III(C) of the communication filed April 9, 2007, the Examiner respectfully disagrees. As addressed above, independent claim 1 and dependent claims 2-16 are not patentable, thus, Applicant's argument with respect to independent claim 17 and dependent claims 18-32 is not persuasive.

53. With respect to Applicant's argument in Section IV of the communication filed April 9, 2007, the Examiner respectfully disagrees. It is noted that Applicant has cited various examples within the specification and drawings that produce a practical application or real world result, however, none of these examples appear within the claims themselves. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Accordingly, claims 1-32 fail to produce a tangible result and are therefore directed to non-statutory subject matter.

Conclusion

STATUS OF CLAIMS IN THE APPLICATION

The following is a summary of the treatment and status of all claims in the application as recommended by MPEP 707.70(i):

CLAIMS REJECTED IN THE APPLICATION

Per the instant office action, **claims 1-32** have received a second action on the merits and are subject of a second action final.

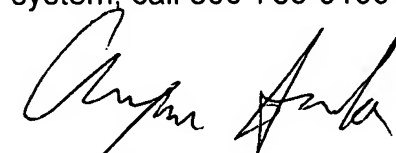
THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arpan P. Savla whose telephone number is (571) 272-1077. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sanjiv Shah can be reached on (571) 272-4098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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July 8, 2007



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